

# ***Technology Plan***

## ***Orangeburg Consolidated School District Five***

**EFFECTIVE 2009 – 2012**

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**Mr. Melvin Smoak, Superintendent**

# Technology Plan

## Orangeburg Consolidated School District Five

Effective 2009 - 2012

ORANGEBURG CONSOLIDATED SCHOOL DISTRICT FIVE  
578 Ellis Avenue  
(803) 534-5454  
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*I verify that all above components for the Orangeburg Consolidated School District Five technology plan have been addressed.*

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Date Signed

Superintendent's Name: Melvin Smoak

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Date Signed

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## District Profile

School District           Orangeburg Consolidated School District 5  
 City, State, Zip         Orangeburg, SC 29115  
 Phone                     803-534-5454  
 Fax                         803-516-6010  
 District Number         3805

Number of schools and other sites	17
Elementary	8
Middle	2
Middle/High	2
High	1
Technology/Vocational School	1
Alternative School	1
District Office Complex	1
Bus Shop	1
Total student enrollment in district	6,900
Percent of students eligible for free and reduced lunch	83%
Number of English as Second Language (ESL) students	70
Number of dropouts	120
Graduation rate	85%
District e-rate discount	89%

## Executive Summary

During the past six years, Orangeburg Consolidated School District Five has invested significant funds to improve information management, video, voice, and data communications within the public school district. This investment has and will continue help the district reach its goal of educating students. Competence in processing information and in using technology will partially define the success of our graduates. Students today need to know how to access and select information and apply that information to new knowledge, comprehension, and problem solving. The district's sustained investment has resulted in the continual transformation of current classrooms into a 21<sup>st</sup> century learning environment. The increasing appearance of complex technology has changed the landscape of the approach and content necessary for learning. Enhancing technology is essential to Orangeburg Consolidated School District Five's mission to provide affordable and complete education to our students.

Technology has changed the very fabric of today's society. Education must analyze the changing fiber of today's society and weave the reality of the information age into the education process. Technology is the main thread for student, teacher, administrative, and parental achievement. There is a critical need for students to be able to access information, manipulate data, and creatively express ideas to others using video, text, and audio media. Through the use of technology, a student can acquire an infinite amount of knowledge; whereby, he/she can convey a personal interpretation, reflection, analysis, and evaluation of the information.

Furthermore, technology is an administrative tool, which can bring efficiency to the management, assessment, and analysis of education and its results. As teachers begin to incorporate performance-based assessment to continuously evaluate and individualize student achievement to improve student learning, the need for additional computer hardware will be evident.

The Information Technology Master Plan uses the five core technology focus dimensions and the major goals set forth too effectively and efficiently utilize and integrate technology.

The five core technology focus dimensions and the major goals set forth for these are as follows:

### **Technology Dimension 1: Learners and Their Environment**

**Goal:** Orangeburg Consolidated School District 5 will use research-proven strategies to provide home, school, and community environments conducive to our students achieving technological literacy by the end of the eighth grade, and to raise the overall level of academic achievement in the District.

### **Technology Dimension 2: Professional Capacity**

**Goal:** Orangeburg Consolidated School District 5 will provide curriculum development and professional development to increase the competency of all Orangeburg Consolidated School District 5 educators so that research-proven strategies and the effective integration of instructional technology systems can be used to increase student achievement.

**Technology Dimension 3: Instructional Capacity**

**Goal:** Orangeburg Consolidated School District 5 will use current and emerging technology to create learner-centered instructional environments that enhance academic achievement.

**Technology Dimension 4: Community Connections**

**Goal:** Orangeburg Consolidated School District 5 will increase Parental involvement and student achievement through the use of technology, including assistive technology, by community involvement and community partnerships.

**Technology Dimension 5: Support Capacity**

**Goal:** Orangeburg Consolidated School District 5 will expand support technology resources to assist educators and learners in meeting the instructional and academic standards as stated in the district Strategic Plan.

Each of these goals is followed by recommended implementation strategies and considerations that reflect aspects of the particular core dimension. Provided at the end of the five dimensions sections in the document, is a cumulative list of benchmarks that are crafted to enable the technology planning committee to validate progress on an annual basis. Ensuring accountability, increasing access, and funding strategies are addressed following the operational plan.

This technology plan, and its annual updates, will serve as the basis for communicating and evaluating Information Technology advances, planning, and budgeting. This culminating effort is the result of information received from the Information Technology staff and the Information Technology Committee. The Information Technology Committee is a composite of school representatives, Information Technology staff, and members of the Executive Cabinet.

## District Needs Assessment

The District Technology Committee creates a needs assessment on an annual bases, believing that the effective use of technology throughout the district facilitates improved teaching and learning, support, management, and operations of the District. The needs assessment examined six areas of need and/or upgrades.

- I. School security
  1. Upgrade and expand video surveillance at Middle and High Schools
  2. Library Media Center security system
  
- II. Classroom and computer lab computer
  1. Add network printers to each classroom and computer lab
  2. Replace older computers with new ones in classrooms and computer labs
  3. Replace teacher and administrator computers
  
- III. Network Infrastructure
  1. Replacing ATM WAN with gigabit WAN (completed FY08-09)
  2. Converting to IP telephony
  3. Expand wireless access in schools and office buildings (upgrades made in FY08-09)
  4. Replace older LAN switches (ongoing process)
  5. Replace older school servers (replaced all schools servers FY08-09)
  
- IV. Software
  1. Data warehouse
  2. HR Information system
  3. Web Portal
  4. Antivirus software
  5. Packet filtering software
  
- V. Other
  1. LCD projectors for classrooms
  2. Electronic whiteboards at each school for teacher use
  3. Air conditioner upgrade for server room
  4. Replace battery backup system
  5. Upgrade data backup system from tape to disk and implement offsite storage solution
  
- VI. Training
  1. Tech Support training
  2. Teacher/District staff training (Proviso 1.40 requirements)
  3. Add additional Technology Instructional Facilitators to provide school level instructional technology training.

## **District Mission Statement**

The mission of Orangeburg Consolidated School District Five, a proud and diverse community, is to ensure a high quality education for all students by providing challenging learning opportunities.

## **Technology Vision/Mission Statement**

The mission of the Orangeburg Consolidated School District Five Information Technology

Department is to:

- Provide a vision for the development, implementation, and management of information technology.
- Provide the latest hardware and software to students, teachers, administrators, and parents.
- Provide hardware and software support in a timely manner.
- Develop and maintain a state of the art network infrastructure and service.
- Create 21<sup>st</sup> century classrooms to make student's learning more engaging.
- Provide staff development training that will empower teachers and administrators to better use the technological tools for achieving academic excellence.

# TECHNOLOGY DIMENSION 1

## LEARNERS AND THEIR ENVIROMENT

**GOAL:** Orangeburg Consolidated School District 5 will use research-proven strategies to provide home, school, and community environments conducive to our students achieving technological literacy by the end of the eighth grade, and to raise the overall level of academic achievement in the District.

## SNAPSHOT OF CURRENT TECHNOLOGY USE

### Facilities and Infrastructure

#### Computer Hardware

#### Network Servers Configuration - District Office

<b>One (2) HP DL380 Server (PowerSchools and Instructional software application)</b> Windows (2005) 4 GB RAM, 784 GB Disk Storage	<b>HP DL380 G5 (Document Images)</b> Microsoft Windows 2003 Operating system 4 GB RAM, 438GB Disk Storage
<b>One (1) HP DL 380</b> Novell Netware 7x Operating System 4 GB RAM, 72 GB Disk Storage (Groupwise E-mail, DSMASTER)	<b>HP DL380 G5 (SIF AGENT)</b> Microsoft Windows 2003 Operating system 4 GB RAM, 438GB Disk Storage <b>HP DL380 G5 (Meals Plus and IGPRO)</b> Microsoft Windows 2003 Operating system 4 GB RAM, 438GB Disk Storage
<b>One (2) Compaq 6000 Servers (Windows 2000)</b> (Trouble Ticket System and MicroMain) 1 GB RAM,36 GB Disk Storage	<b>One (1) Compaq DL 380</b> (Windows 2003) 4 GB RAM, 72 GB Disk Storage <b>One Compaq ML750 Server (Novell Netware 6.x) Outside DNS</b> 4 GB RAM, 36 GB Disk Storage
<b>Two (2) HP servers (Windows 2000)</b> (Instructional Application services) 2 GB RAM, 108 GB Disk storage each <b>Two (2) HP Servers (Windows 2003)</b> (Instructional Application services) 2 GB RAM, 108 GB Disk storage each	<b>HP Backup 10 Tape System</b> <b>HP AIO Storage Server (Windows 2000)</b> 4GB RAM, 3 TB Disk storage
<b>One (1) HP DL380 Server (Library Automation System) (Windows 2003)</b> 4 GB RAM, 584 GB Disk Storage	<b>One (4) Compaq 6000 Servers (Novell 7.x)</b> (SIS(sasi), Zen/Ghost image) 1 GB RAM,36 GB Disk Storage
<b>One (1) DL 380 Windows 2003 server (Trend Micro)</b> 1 GB RAM, 72 GB Disk storage	

## Network Servers Configuration – Schools

<p><b>Elementary Schools (8)</b>                  HP DL380 Servers                  Novell Netware Operating System 7x                  4 GB RAM, 580 GB Disk Storage</p>	<p><b>Middle/High School (2)</b>                  HP DL380 Servers                  Novell Netware Operating System 7x                  4 GB RAM, 580 GB Disk Storage</p>
<p><b>Middle Schools (2)</b>                  HP DL380 Servers                  Novell Netware Operating System 7x                  4 GB RAM, 580 GB Disk Storage</p>	<p><b>High School (1)</b>                  HP DL380 Servers                  Novell Netware Operating System 7x                  4 GB RAM, 580 GB Disk Storage</p>

<p><b>nter</b>                  ers                  Operating System 7x                  0 GB Disk Storage</p>	<p><b>Brookdale Elementary</b>                  HP DL380 Servers                  Novell Netware Operating System 7x                  4 GB RAM, 580 GB Disk Storage                  (Instructional Application Waterford)</p>
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## School Classroom and Media Center hardware

<b>School Classrooms</b>	
<b>Elementary Schools</b>	<p><b>3 to 4 computers</b> (3 HP 5000 &amp; 6000 series)</p> <p><b>1 Printer</b> ( Brother HL5150DN/HL5250DN network printer, HP 1200, 1100 or 1300 series printer)</p> <p><b>1 Telephone</b></p> <p><b>1 20' or 24 " Television</b></p> <p><b>1 Computer lab for every 300 students</b> (20 HP P4 computers and network printer or mobile cart with 30 HP laptops)</p>
<b>Middle Schools</b>	<p><b>3 computers</b> (3 HP 5000 series)</p> <p><b>1 Printer</b> ( Brother HL5150DN/HL5250DN network printer, HP 1200, 1100 or 1300 series printer)</p> <p><b>1 Telephone</b></p> <p><b>1 20' or 24 " Television</b></p> <p><b>1 Computer lab for every 300 students</b> (20 HP P4 computers and network printer or mobile cart with 30 HP laptops)</p>
<b>High Schools</b>	<p><b>3 computers</b> (3 HP 5000 series)</p> <p><b>1 Printer</b> ( Brother HL5150DN/HL5250DN network printer, HP 1200, 1100 or 1300 series printer)</p> <p><b>1 Telephone</b></p> <p><b>1 20' or 24 " Television</b></p> <p><b>1 Computer lab for every 300 students</b> (20 HP P4 computers and network printer or mobile cart with 30 HP laptops)</p>
<b>Media Center</b>	
<b>Elementary Schools</b>	<p>5 computers</p> <p>1 network printer</p> <p>Teknet Media Retrieval system</p>
<b>Middle School</b>	<p>10- 15 computers</p> <p>1 network printer</p> <p>Teknet Media Retrieval system</p>
<b>High Schools</b>	<p>10 - 20 computers</p> <p>1 or 2 network printer</p> <p>Teknet Media Retrieval system</p>



## Computer Software

The following provides a brief description of the computer software and applications that are supported district wide school/administrative computing.

Instructional Software Applications	Grade													
	Pre-K, K	1	2	3	4	5	6	7	8	9	10	11	12	DO
Accelerated Math	X	X	X	X	X	X	X	X	X	X	X	X	X	
Accelerated Reader	X	X	X	X	X	X	X	X	X	X	X	X	X	
Star Math		X	X	X	X	X	X	X	X	X	X	X	X	
Star Reading		X	X	X	X	X	X	X	X					
Understanding Math		X	X	X	X	X	X	X	X	X	X	X	X	
Scantron Achievement Series	X	X	X	X	X	X	X	X	X	X	X	X	X	X
NWEA MAP				X	X	X	X	X	X	X	X			X
Headsprout	X	X	X											
Academy of Reading	X	X	X	X	X	X	X	X	X					
Microsoft Office (Word, Excel, Access, and PowerPoint)	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Riverdeep Math	X	X	X	X	X	X	X	X	X	X				
Riverdeep Reading	X	X	X	X	X	X								
Riverdeep Science										X	X	X	X	
Waterford Reading	X	X	X											
Kidspiration	X	X	X	X	X	X								
Inspiration							X	X	X	X	X	X	X	
A+ Science							X	X	X					
BrainPOP	X	X	X	X	X	X	X	X	X	X	X	X	X	
Discovery Science							X	X	X					
Plato Learning Series							X	X	X	X	X	X	X	
Accelerated Science										X	X	X	X	
MySkills Tutorial							X	X	X	X	X	X	X	
Triumph SAT/ACT										X	X	X	X	
Micro Type Keyboarding							X	X	X	X	X	X	X	

**Administrative/Teacher/Support Staff Software****Novell GroupWise (E-mail)****Class XP****Excent****Integrate****E-Chalk Lesson Planner****PowerSchool/PowerTeacher****CSI Accounting Plus****Sasi XP****Network and Workstation Operating Systems Software****Novell Netware 6x, 7x****Microsoft Windows 2000, 2003 and 2005 Server****Microsoft Windows 2000 Professional****Microsoft Window XP****Mac OS**

## **Telecommunication Infrastructure**

### **Telephone**

All classrooms have a telephone with outside dialing and receiving capabilities through the school's switch-board, emergency panic button for two-way communications to the front office, and hands-free intercom from office to classrooms for one to one communications.

### **Wide Area Network (WAN)**

The district wide area network is comprised of a 10 gigabit and 1 gigabit ethernet backbone. The lease of dark fiber from Time Warner Cable and the use of e-rate funds have allowed the district to leverage its ability to provide voice, video, and data services to all of its schools. The wide area network provides gigabit ethernet bandwidth between schools and the district office.

**See diagram on Appendix C**

### **Local Area Network (LAN)**

The use of e-rate funding has allowed the district to leverage its ability to provide network infrastructure cabling and electronics to build a robust LAN for each school and the district office. The local area network within each school is configured using Cisco system electronics providing 1000 Mbps between the MDF and IDF and 100 Mbps to the desktop. All classrooms are wired with six hardwire connections for the local area network and the internet. All hardwired connections are type 100Mbps Ethernet. All elementary schools are 100% wireless. All classrooms and offices within the schools are wired for TV reception, with a head end at each school for independent broadcasting.

**See diagram on Appendix D**

### **Internet Access**

The use of e-rate funding has allowed the district to leverage its ability to provide internet access for the district end-users. Cisco system electronics including cache engine, Pix firewall, and router provide access to the internet through a 10 megabit connection.

**See diagram on Appendix E**

## OPERATIONAL PLAN

### I. OBJECTIVES AND STRATEGIES

**GOAL:** Orangeburg Consolidated School District 5 will use research-proven strategies to provide home, school, and community environments conducive to our students achieving technological literacy by the end of the eighth grade and to raise the overall level of academic achievement in the District.

<b>OBJECTIVES</b>	<b>STRATEGIES</b>
1.1 Students will use technology to acquire and demonstrate communication, collaboration, and engagement skills that are aligned with state standards across the curriculum and will thereby increase their level of academic achievement.	A. Provide opportunities and resources to schools to facilitate the development and implementation of effective communication and collaboration skills using technology in the core content areas B. Conduct student projects that will yield sustained, engaged learning and collaboration in the core content areas C. Have students present their collaborative projects to identified audiences D. Recognize and promote best practices that successfully integrate technology, including assistive technology, into the curriculum E. Provide appropriate accommodations for students with special needs when conducting tests, including standardized tests, using technology
1.2 Students will engage in authentic learning activities that are aligned with state standards and that integrate technology, including assistive technology, into the core content.	A. Develop technology-enhanced learning activities aligned with state standards in core content areas B. Create and maintain student technology portfolios documenting grade-level-appropriate technology competencies C. Appoint or hire district wide school technology coaches or form district wide technology integration teams to offer guidance to schools, educate teachers, and help ensure that lesson plans and activities incorporate a variety of technologies, including those appropriate for students with special needs

<p><b>1.3</b> Students will select the appropriate tools to complete authentic, real-life multidisciplinary tasks and will demonstrate technology competence by the end of the eighth grade.</p>	<ul style="list-style-type: none"> <li>A. Create and use lesson activities in which students employ a variety of technology tools, including assistive technology, to complete authentic multidisciplinary tasks</li> <li>B. Measure student technology proficiency by using surveys and performance-based assessments</li> <li>C. Provide all students, including those with special needs, access to a range of high and low technology solutions, including software, peripherals, and other tools to increase student communication, participation, and collaboration</li> </ul>
<p><b>1.4</b> The OCSD5 will provide students with an enhanced learning environment through technological tools, including assistive technology, that are designed to promote high academic achievement.</p>	<ul style="list-style-type: none"> <li>A. Establish school and community learning environments that enable students to use technology for real-world problem solving and research</li> <li>B. Adopt grade-level-appropriate technology standards and integrate them into the curriculum to enable students to fully participate in today's information-rich global society</li> <li>C. Adopt grade-level-appropriate technology standards and integrate them into the curriculum to prepare students to function in an information-rich global society</li> </ul>

## II. ACTION LIST

- The OCSD5 should provide access to effective, research-based assistive technologies—including software, peripherals, and other tools to increase student communication, collaboration, and engagement—that will support inclusion of students with disabilities in the core content courses at all grade levels.
- The OCSD5 should develop strategies to ensure that school improvement plans address the use of technology, including assistive technology, to support a shared learning environment that includes educators, parents, and community members.
- The OCSD5 should establish grade-level-appropriate technology standards and competencies based on the ISTE NETS-S.
- The OCSD5 should ensure improved student achievement test scores in the core content areas, increased student access to technology (shown by the OCSD5 Technology Counts on-line survey), and increased student access to technology outside the school environment.
- The OCSD5 and the school districts should establish minimum requirements for student portfolios that document student progress by including technology collaborative scoring rubrics and checklists, videos and pictures of student activities, samples of individual and collaborative problem-solving and research projects, samples of student products created using a variety of technology tools, and samples of other student work.
- Student portfolios and checklists in all grades, as well as a performance-based technology applications evaluation at the completion of the fifth and eighth grades, should be used to assess student technology proficiency, as well as the effectiveness of the assistive technology tools used by students with special needs.
- Students, themselves, should be given opportunities to assess the effectiveness of technology tools, including the range of assistive technology, being used for classroom activities.
- OCSD5 should complete initial and ongoing assessments to measure increased availability of technology opportunities and resources.
- Educators and parents should complete initial and follow-up assessments to ensure that the use of technology, including the range of assistive technology tools, is effective in enhancing student learning.

### III. IMPLEMENTATION ACTION STEPS

#### **OCSD5**

- Assign school technology coaches or form district wide technology integration specialist teams to offer support to schools
- Assign assistive technology coaches to educate teachers and help ensure that lesson plans and activities incorporate a variety of technologies in ways that make them accessible to individuals special needs
- Offer professional development courses incorporating innovative delivery strategies
- Begin working with teachers in the classroom to create lesson plans that incorporate a variety of technologies into authentic multidisciplinary tasks
- Recognize exemplary technology teachers and students
- Hold technology fairs that showcase exemplary student technology projects to the community
- Encourage home and community involvement in the public school system by electronic communications and other media

#### **OCSD5 SCHOOLS**

- Implement an on-line system for displaying student work such as e-mail projects, on-line projects, and so forth
- Recognize exemplary student technology projects
- “Technology Nights” that showcase exemplary student technology projects and technology teachers to the community
- Provide access to technology resources, including assistive technology, during nontraditional school hours
- Include goals and strategies for technology and assistive technology development in school improvement plans
- Encourage home and community involvement in the public school system through the use of electronic communications and other media

## **IV. FUNDING CONSIDERATIONS**

### **OCSD5**

- Technology professional development
- Technology course development
- Technology staff
- Recognition programs
- Teacher and student portfolio materials
- Technology resources to support standards-based learning across the curriculum

### **OCSD5 SCHOOLS**

- Technology professional development
- Technology course development
- Technology staff
- Recognition programs
- Teacher and student portfolio materials
- Technology resources to support standards-based learning across the curriculum

## V. EVALUATION

Objectives	Possible Baseline Data	Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report	Outcomes (Include "action list" items achieved.)				
			JAN. 2009	JAN. 2010	JAN. 2011	JAN. 2012	JAN. 2013
<p><b>1.1</b> Students will use technology to acquire and demonstrate communication, collaboration, and engagement skills that are aligned with state standards across the curriculum and will thereby increase their level of academic achievement.</p>	<ul style="list-style-type: none"> <li>• Statewide achievement test scores</li> <li>• District report cards</li> <li>• Technology surveys</li> <li>• Student portfolios</li> <li>• School technology and improvement plans</li> <li>• District, school, and community surveys</li> </ul>	<ul style="list-style-type: none"> <li>• Statewide achievement test scores</li> <li>• District report cards</li> <li>• Technology surveys</li> <li>• Student portfolios</li> <li>• Observations and interviews</li> <li>• Anecdotal records</li> <li>• Documented access to on-line resources</li> <li>• Listing of recognition programs</li> </ul>					
<p><b>1.2</b> Students will engage in authentic learning activities that are aligned with state standards and that integrate technology, including assistive technology, into the core content.</p>							
<p><b>1.3</b> Students will select the appropriate tools to complete authentic, real-life multidisciplinary tasks and will demonstrate technology competence by the end of the eighth grade.</p>							
<p><b>1.4</b> The OCS D5 will provide students with an extended learning environment through technological tools, including assistive technology, that are designed to promote high academic achievement.</p>							

## **TECHNOLOGY DIMENSION 2**

### **PROFESSIONAL CAPACITY**

**Goal:** Orangeburg Consolidated School District 5 will provide curriculum development and professional development to increase the competency of all Orangeburg Consolidated School District 5 educators so that research-proven strategies and the effective integration of instructional technology systems can be used to increase student achievement.

### **SNAPSHOT OF CURRENT TECHNOLOGY USE IN DISTRICT**

The Office of Staff Development conducts a survey of district employees annually to ascertain preferred training needs. Information from this survey is then shared with the support team that provides the training. The District uses this data to ensure that the requirements of (Proviso 1.29) are met. The Office of Staff Development offers an online exam for its employees to demonstrate technology proficiency. The District has hired six (6) Technology Integration Facilitators to model and assist teachers in the integration of technology into daily instruction.

## OPERATIONAL PLAN

### I. OBJECTIVES AND STRATEGIES

**GOAL:** Orangeburg Consolidated School District Five will provide curriculum development and professional development to increase the competency of all Orangeburg Consolidated School District Five educators so that research-proven strategies and the effective integration of instructional technology systems can be used to increase student achievement.

<b>OBJECTIVES</b>	<b>STRATEGIES</b>
<p><b>2.1</b> The OCSD5 will enable educators to achieve and demonstrate proficiency in integrating state-recommended instructional technology standards (ISTE NETS-A, ISTE NETS-S, and ISTE NETS-T) into their specific area of professional practice to increase student achievement.</p>	<ul style="list-style-type: none"> <li>A. Encourage an initial teacher certification process that requires demonstration of proficiency in integrating instructional technology standards</li> <li>B. Adopt a process that requires teachers to demonstrate ongoing proficiency in integrating instructional technology standards</li> <li>C. Include in district technology plans a professional development program that provides a guide for teachers to progress from their current levels of ability in using technology, including appropriate assistive technology, to full proficiency</li> <li>D. Require district and school administrators to demonstrate technology proficiencies based upon the state-recommended standards for administrators (ISTE NETS-A)</li> </ul>
<p><b>2.2</b> The OCSD5 will provide the schools with full-time multidimensional technology leadership whose focus is to ensure that technology is making a significant instructional and administrative impact for students, teachers, and administrators.</p>	<ul style="list-style-type: none"> <li>A. Appoint or hire full-time technology coaches to assist with basic technology skills and the integration of the technology into classroom instruction in every school</li> <li>B. Require that technology coaches provide direct training and consultation to teachers in their classrooms, with special emphasis on helping administrators, teachers, and students meet the state-recommended technology standards (ISTE NETS-A, ISTE NETS-T, ISTE NETS-S ) as well as helping students to meet the state’s content standards in all areas</li> </ul>
<p><b>2.3</b> The OCSD5 will collaborate in planning for</p>	<ul style="list-style-type: none"> <li>A. Develop and submit a technology plan that (1)</li> </ul>

<p>professional development, ensuring that teachers and district staff are trained to use technology, including assistive technology, to enhance learning.</p>	<p>is directed by the district’s technology leadership, (2) is designed for the district and for each school in the district as applicable, and (3) calls for site-based input from technology committees or teams in each building</p> <ul style="list-style-type: none"> <li>B. Include in district technology plans professional development for district staff and teachers to be part of assistive technology assessment teams</li> <li>C. Include in district technology plans the training needed to ensure the accessibility of electronic and information technology to students with special needs</li> <li>D. Include in district technology plans the training needed for school and district staff to evaluate software in order to make decisions that ensure the promotion of higher-order thinking skills for all students, including those with special needs</li> </ul>
<p><b>2.4</b> The OCSD5 will provide schools with information and training in technology integration so that teachers can use research-based best-practice instructional methods throughout the curriculum</p>	<ul style="list-style-type: none"> <li>A. Offer professional development activities and training in a variety of ways (i.e., on-site, off-site, on-line, self-paced, and combinations of these methods) to address the technology needs of staff, paying special attention to high-need schools and schools serving economically disadvantaged populations, including students with special needs</li> <li>B. Provide a list of professional development opportunities on the SCTL (South Carolina: Teaching, Learning, Connecting) Web portal at <a href="http://www.sctlc.com">http://www.sctlc.com</a> and publicize other recognized professional opportunities for educators</li> <li>C. Provide professional development opportunities focused on aligning state technology standards with state content standards</li> <li>D. Develop alliances with subject, grade, or position-specific professional organizations to promote technology integration throughout the K–12 curriculum</li> </ul>

	<ul style="list-style-type: none"> <li>E. Increase the availability of technology professional development tools to teachers: access to laptop computers and presentation devices, Internet access at the classroom level, interactive on-line access to state curriculum standards and lesson plans, access to Web-based and/or CD-ROM-based training opportunities, and access to state-of-the art training centers in their particular geographic areas</li> <li>F. Develop network of professional development providers who have the skills and experience necessary to prepare teachers for effective technology use</li> </ul>
<p><b>2.5</b> The OCSD5 will assess the overall effectiveness of professional development in the area of instructional technology standards and the impact of technology on student achievement.</p>	<ul style="list-style-type: none"> <li>A. Establish minimum levels of teacher technology proficiency for replication and adaptation across the district</li> <li>B. Incorporate instructional technology assessment into current teacher and administrator evaluation processes</li> <li>C. Administer a district wide needs assessment to teachers and administrators to determine current levels and types of professional development that must be offered</li> <li>D. Administer evaluations to determine the effectiveness and impact of the professional development offered to teachers and administrators</li> <li>E. Encourage teachers to create and maintain technology portfolios showing examples of their students' work and documenting use of technology in their classrooms</li> <li>F. Develop an on-line professional development tracking system of teachers and administrators</li> </ul>

## II. ACTION LIST

- Provide professional development opportunities involving the proper use of the telephone and voice mail.
- Provide professional development opportunities involving the proper use of Groupwise email.
- Provide professional development opportunities involving the proper use of electronic whiteboards.
- Provide professional development opportunities involving the proper use of the Parentlink system for administrators and teachers to communicate with parents and community.
- Provide professional development opportunities on effective integration of technology into daily classroom instruction.
- Provide professional development opportunities on the most current and/or cutting edge hardware and software for technician training.
- Provide training for teachers using assistive technology.
- Provide training for teachers and school administrators on the implementation of the District's Unified curriculum.
- Districts should hire or appoint full-time leadership for the use of technology, including that for assistive technology, to increase student learning.
- Leadership committees should include participants such as educators (including special educators), therapists, school administrators, parents, and librarians.
- The existing regional alliance structure that brings together service providers from the various groups should be strengthened. Each alliance should work to develop at least one technology initiative during each year that involves all members.
- The OCSD5 should utilize the expertise of staff members and faculty in school districts and institutions of higher learning throughout the nation.
- A school technology coach should be hired or appointed in every school in the district.
- An assistive technology specialist and an assistive technology assessment team should be hired or appointed in every school as deemed necessary by the population of students with special needs.
- The OCSD5 will submit an annual technology plan that documents site-based input and includes a plan for professional development that outlines the technology education offerings and requirements, including assistive technology.

- The OCSD5’s Office of Technology should collaborate with the Office of Curriculum, Instruction and Assessment (CIA) to develop recommendations for teacher professional development plans, integrating technology and content standards into professional development opportunities.
- District and school administrators should submit to their supervisors an annual professional development plan that includes technology goals that are aligned with ISTE NETS-A, and is reviewed as part of the administrator’s annual evaluation.
- The OCSD5 should create and promote, through its Regional Technology Centers and through the SCTLC Web portal, a professional development component that outlines the technology education offerings and requirements, including assistive technology, that exist throughout South Carolina and the nation as a whole. Usage reports should indicate that the SCTLC “Training” tab is being widely used by educators.
- The OCSD5 should provide training to district- and building-level administrators in order to effectively assess a teacher’s ability to integrate technology, including assistive technology, into the curriculum.
- The OCSD5 should provide training for assistive technology teams in assistive-technology assessment, options, and curriculum integration.
- The OCSD5 should provide training for teachers in using assistive technology tools.
- The OCSD5 should provide training in the evaluation of software in order to make decisions that ensure the promotion of higher-order thinking skills for all students, including those with special needs.
- The OCSD5 should provide training in accessibility issues involving applicable state and federal legislation.
- Teachers should keep portfolios that include sample lesson plans indicating increased technology integration across the core content areas in alignment with the state academic standards.
- The OCSD5 should collect, maintain, and report documentation of teacher technology portfolio data.
- The OCSD5 should adopt assessment instruments and develop a model or template for teacher portfolio content.
- The OCSD5 should develop or adopt on-line assessment instruments and make them available to all schools in the district to determine teachers’ level of technology proficiency.
- OCSD5 should develop a tracking tools (electronic or Web-based surveys) of district professional activities should be completed each year in conjunction with ADEPT (Assisting, Developing, and Evaluating Professional Teaching) or other district evaluation procedures that include an instructional technology component.
- District reports and evaluations of professional development initiatives and reports on the use of technology grant funds should show an increase in access to professional development.
- The OCSD5 should continue to play a leadership role in working with the legislature and other entities in securing funding and training for technology, including assistive technology, initiatives.



### **III. IMPLEMENTATION ACTION STEPS**

#### **DISTRICTS**

- Submit a technology plan, including a professional development plan, to the Office of Technology for approval
- Administer a district technology professional development assessment to administrators and teachers to evaluate current training need areas and to create the district technology professional development plan on the basis of current needs
- Participate in ongoing, sustained professional development offerings, maintaining a log and a journal for each course, workshop, event, conference, and so forth, to place in portfolios
- Submit teacher technology proficiency assurance forms to the Office of Technology by the announced deadline
- Initiate partnerships with community entities to create greater access to technology, including assistive technology, and a community learning environment
- Perform random and periodic checks of teacher and administrator portfolios to measure the impact of professional development in technology
- Administer needs assessments to identify areas of weakness and follow up with assessments that measure the impact of professional development in technology
- Evaluate and adjust technology professional development plans as indicated by needs assessments

#### **SCHOOLS**

- Submit a technology plan, including a professional development plan, to the local district office
- Hire or appoint a school technology coach who is knowledgeable about assistive technologies for each school and will submit training and needs reports to the regional technology specialist
- Begin keeping technology portfolios
- Evaluate teacher and administrator portfolios to measure the impact of professional development in technology
- Administer needs assessments to identify areas of weakness and follow up with assessments that measure the impact of professional development in technology
- Monitor and adjust professional development in technology as indicated by needs assessments

## **IV. FUNDING CONSIDERATIONS**

### **DISTRICTS**

- Committee development of professional development plans
- Committee development of district and school technology plans
- Professional development needs-assessment tools
- Evaluation tools to measure the impact and effectiveness of technology professional development
- Evaluation experts to help show the impact of programs and initiatives
- High-quality sustained professional development programs offered via innovative delivery methods
- Scientifically based research

### **SCHOOLS**

- Committee development of district and school technology plans
- School technology leader salary
- Professional development needs-assessment tool
- Evaluation tools to measure the impact and effectiveness of technology professional development
- Evaluation experts to help show the impact of programs and initiatives
- Scientifically based research

## V. EVALUATION

Objectives	Possible Baseline Data	Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report	Outcomes (Include "action list" items achieved.)				
			JAN. 2009	JAN. 2010	JAN. 2011	JAN. 2012	JAN. 2013
<p><b>2.1</b> The OCSD5 will enable educators to achieve and demonstrate proficiency in integrating state-recommended instructional technology standards (ISTE NETS-A, ISTE NETS-S, and ISTE NETS-T) into their specific area of professional practice to increase student achievement.</p>	<ul style="list-style-type: none"> <li>Statewide achievement test scores</li> <li>District report cards</li> <li>Teacher technology proficiency proviso forms</li> <li>Professional development surveys</li> </ul>	<ul style="list-style-type: none"> <li>Statewide achievement test scores</li> <li>District report cards</li> <li>Professional development tracking and surveys</li> <li>Teacher technology proficiency proviso forms</li> </ul>					
<p><b>2.2</b> The OCSD5 will provide the schools with full-time multidimensional technology leadership whose focus is to ensure that technology is making a significant instructional and administrative impact for students, teachers, and administrators.</p>	<ul style="list-style-type: none"> <li>Teacher and administrator portfolios</li> <li>School technology and improvement plans</li> </ul>	<ul style="list-style-type: none"> <li>Teacher and administrator portfolios</li> <li>Observations and interviews</li> <li>Anecdotal records</li> <li>Documented access to on-line resources</li> </ul>					
<p><b>2.3</b> The OCSD5 will collaborate in planning for professional development, ensuring that teachers and district staff are trained to use technology, including assistive technology, to enhance learning.</p>	<ul style="list-style-type: none"> <li>SCTLC "Training" tab</li> <li>Technology assessments</li> </ul>	<ul style="list-style-type: none"> <li>SCTLC "Training" tab</li> <li>Technology assessments</li> </ul>					
<p><b>2.4</b> The OCSD5 will provide schools with information and training in technology integration so that teachers can use research-based best-practice instructional methods throughout the curriculum.</p>							

## V. EVALUATION

Objectives	Possible Baseline Data	Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report	Outcomes (Include "action list" items achieved.)				
			JAN. 2009	JAN. 2010	JAN. 2011	JAN. 2012	JAN. 2013
<p><b>2.5</b> The OCSD5 will assess the overall effectiveness of professional development in the area of instructional technology standards and the impact of technology on student achievement</p>							

## TECHNOLOGY DIMENSION 3

### INSTRUCTIONAL CAPACITY

**Goal:** Orangeburg Consolidated School District 5 will use current and emerging technology to create learner-centered instructional environments that enhance academic achievement.

### SNAPSHOT OF CURRENT TECHNOLOGY USE

OCSD5 implemented a new Unified Curriculum for all content areas.

Implemented in 2005-2006 Scantron Performance Series a computer-based assessment for all students in grades 3 – 8, to provide consistent measures of performance for all students across the District at least twice each year.

Implemented in 2007-2008 NWEA MAP a computer-based assessment for all students in grades 6 - 10, to provide consistent measures of performance for all students across the District at least twice each year. The NWEA MAP test replaced the Scantron Performance Series test for grades 6- 10.

Implemented in 2005 – 2006 Scantron Achievement Series, a computer based program to deliver and score nine week benchmark test from the district and allow schools to do their own level of testing all tied to SC state curriculum standards.

Implemented in 2008-2009 NWEA MAP a computer-based assessment for all students in grades 3 - 5, to provide consistent measures of performance for all students across the District at least twice each year. The NWEA MAP test replaced the Scantron Performance Series test for grades 3 - 5.

Implemented a district wide online lesson planner (E-Chalk) for teachers to maintain and post lesson plans.

Implemented web portal so that teachers can create their own web pages to communicate information to parents and students.

## OPERATIONAL PLAN

**Goal:** Orangeburg Consolidated School District 5 will use current and emerging technology to create learner-centered instructional environments that enhance academic achievement.

### I. OBJECTIVES AND STRATEGIES

<b>OBJECTIVES</b>	<b>STRATEGIES</b>
<p><b>3.1</b> The OCSD5 will develop a technology framework for local planning that addresses the steps necessary to create a technology-rich environment that will foster increased achievement by all students, including those with special needs.</p>	<p>A. Ensure that curricular design, instructional strategies, and learning environments integrate appropriate technologies (including the range of assistive technology options) to significantly impact teaching and learning</p> <p>B. Facilitate the use of technologies to support and enhance instructional methods (including the use of hardware, software, and assistive technology) that develop higher-level thinking, decision-making, and problem-solving skills</p>
<p><b>3.2</b> The OCSD5, the school districts, and the schools will provide teachers with the technology resources, including assistive technology, necessary to increase academic achievement by engaging students in active learning.</p>	<p>Provide teachers with access to knowledgeable personnel, productivity tools, on-line services, media-based instructional materials, and primary sources of data in settings that enrich and extend teaching goals</p>
<p><b>3.3</b> The OCSD5, the school districts, and the schools will provide students with access to current and emerging technology resources that will extend their learning beyond the traditional classroom setting and schedule</p>	<p>Provide students with access to technology, on-line services, and media-based instructional materials, allowing them to select appropriate tools that will enrich and extend their learning</p>
<p><b>3.4</b> The school districts will provide and support a variety of multimedia equipment and software for teaching and learning.</p>	<p>A. Communicate via the district technology plan a vision for multimedia infrastructure designed to support instruction</p> <p>B. Establish a system for identifying, specifying, prioritizing, and managing equipment for multimedia development in direct support of curricular and professional development objectives</p>

## II. ACTION LIST

- The OCSD5 should conduct technology planning meetings to address curricular design, instructional needs of all teachers, instructional strategies, and appropriate learning environments.
- The OCSD5 should conduct technology planning meetings to address the inclusion of appropriate assistive technology into curricular design, instructional strategies, and learning environments (general and special education).
- The OCSD5 should pursue funding opportunities such as grants to provide funds to acquire and maintain hardware and software for use in classroom instruction.
- The OCSD5 should pursue funding opportunities such as grants to acquire and maintain assistive technology for use in classroom instruction and home access when appropriate.
- Student portfolios should display products resulting from the integration of technology into the core curriculum areas and documentation of student presentations that illustrate the ability to synthesize and analyze information.

### **III. IMPLEMENTATION ACTION STEPS**

#### **DISTRICTS**

- Conduct technology curriculum planning meetings
- Include an instructional technology plan and an assistive technology plan in the technology plan to be submitted to the Office of Technology for approval
- Create methods of gauging technology readiness
- Evaluate hardware and software for desirable student outcomes and standardize selection when appropriate
- Designate technology leaders
- Participate in ongoing, sustained professional development offerings, maintaining a log and a journal for each course, workshop, event, conference, and so forth, to place in portfolios
- Submit teacher technology proficiency assurance forms to the Office of Technology by the announced deadline
- Initiate partnerships with community entities to create greater access to technology and a community learning environment
- Pursue funding opportunities such as grants to acquire and maintain hardware, instructional software, and assistive technology
- Pursue the delivery of courses for students and professional development courses for teachers via innovative methods

#### **SCHOOLS**

- Conduct technology curriculum planning meetings
- Submit a technology plan, including a professional development plan, to the local district office
- Hire or appoint a school technology coach who is knowledgeable about assistive technologies for each school and will submit training and needs reports to the regional technology specialist
- Ensure that teachers and administrators begin keeping technology portfolios
- Evaluate teacher and administrator portfolios to measure the impact of technology integration, including assistive technology, on student achievement
- Interview students to assess information literacy and the integration of technology into the classroom
- Pursue funding opportunities such as grants to acquire and maintain hardware, instructional software and assistive technology

## **IV. FUNDING CONSIDERATIONS**

### **DISTRICTS**

- Committee development of district and school technology plans
- Evaluation tools to measure the impact and effectiveness of the integration of technology with regard to student achievement
- Portfolio creation
- Evaluation experts to help show the impact of programs and initiatives
- Scientifically based research
- Distance learning
- Eighth-grade proficiency measurement
- School technology leader implementation
- Professional development

### **SCHOOLS**

- Committee development of district and school technology plans
- School technology leader implementation
- Professional development needs-assessment tools
- Evaluation tools to measure the impact and effectiveness of the integration of technology with regard to student achievement
- Evaluation experts to help show the impact of programs and initiatives
- Scientifically based research
- Professional development

## V. EVALUATION

Objectives	Possible Baseline Data	Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report	Outcomes (Include "action list" items achieved.)				
			JAN. 2009	JAN. 2010	JAN. 2011	JAN. 2012	JAN. 2013
<p><b>3.1</b> The OCSD5 will develop a technology framework for local planning that addresses the steps necessary to create a technology-rich environment that will foster increased achievement by all students, including those with special needs.</p>	<ul style="list-style-type: none"> <li>Statewide achievement test scores</li> <li>Technology readiness and access surveys</li> <li>District report cards</li> </ul>	<ul style="list-style-type: none"> <li>Statewide achievement test scores</li> <li>District report cards</li> <li>Technology readiness and access surveys</li> <li>Teacher technology proficiency proviso forms</li> </ul>					
<p><b>3.2</b> The OCSD5 will provide teachers with the technology resources, including assistive technology, necessary to increase academic achievement by engaging students in active learning.</p>	<ul style="list-style-type: none"> <li>Teacher technology proficiency proviso forms</li> <li>Teacher and administrator portfolios</li> </ul>	<ul style="list-style-type: none"> <li>Teacher and administrator portfolios</li> <li>Observations and interviews</li> <li>Anecdotal records</li> </ul>					
<p><b>3.3</b> The OCSD5 will provide students with access to current and emerging technology resources that will extend their learning beyond the traditional classroom setting and schedule.</p>	<ul style="list-style-type: none"> <li>School technology and improvement plans</li> <li>Technology assessments</li> </ul>	<ul style="list-style-type: none"> <li>Documented access to on-line resources</li> <li>Technology assessments</li> </ul>					
<p><b>3.4</b> The school districts will provide and support a variety of multimedia equipment and software for teaching and learning.</p>	<ul style="list-style-type: none"> <li>Documentation of offerings provided via innovative delivery methods</li> </ul>	<ul style="list-style-type: none"> <li>Documentation of offerings provided via innovative delivery methods</li> </ul>					

## **TECHNOLOGY DIMENSION 4**

### **COMMUNITY CONNECTIONS**

**GOAL:** Orangeburg Consolidated School District 5 will increase Parental involvement and student achievement through the use of technology, including assistive technology, by community involvement and community partnerships.

### **SNAPSHOT OF CURRENT TECHNOLOGY USE**

OSCD5 currently uses eChalk web portal services for the district and school websites. On these the district site is a link to the Parent Services Portal that allows parents and students' access to school based academic programs. Parents can login to the different programs to review their children(s) progress. Information is available on the school sites that provide needed to current parents as well as prospective parents. The use of ParentLink a message delivery services is used by schools to send voice and email messages to parents. The system also provides accounts for parents to review student's grades and attendance.

## OPERATIONAL PLAN

**GOAL:** Orangeburg Consolidated School District 5 will increase Parental involvement and student achievement through the use of technology, including assistive technology, by community involvement and community partnerships.

### I. OBJECTIVES AND STRATEGIES

<b>OBJECTIVES</b>	<b>STRATEGIES</b>
<p><b>4.1</b> The OCSD5 will establish community technology partnerships and collaborations by providing tools, resources, and training that support student transition, achievement, and outcomes. (The term <i>community</i> includes parents, businesses, state and local agencies, nonprofit groups, and institutions of higher education.)</p>	<ul style="list-style-type: none"> <li>A. Form district-community partnerships to provide students with real-world experiences in the use of technology, including assistive technology, that enhance academic achievement</li> <li>B. Form district-community partnerships to help research and evaluate school and district technology projects</li> <li>C. Provide recognition/reward programs and/or incentives for partnerships showing impact</li> <li>D. Write community-collaborative technology grants to develop and fund the use of technology to improve teaching and learning</li> <li>E. Form district-community partnerships to facilitate the use of technology, including assistive technology, in the public schools and to improve outcomes for students transitioning from school to work or higher education</li> </ul>
<p><b>4.2</b> The OCSD5 will fully utilize all available resources by fostering collaboration and cooperation among state-supported organizations, institutions, and initiatives.</p>	<ul style="list-style-type: none"> <li>A. Identify all of the organizations, institutions, and initiatives that are currently focused on instructional technology applications</li> <li>B. Compile a database of institutions willing to partner with high-need school districts by creating a message board on the South Carolina: Teaching, Learning, Connecting (SCTLC) Web portal (<a href="http://www.sctlc.com">http://www.sctlc.com</a>) where potential partners can communicate with one another and generate ideas</li> </ul>

	<p>C. Partner with other school districts as well as community entities to collaborate in order to provide assistive technology demonstration, loan, and assessment for students with special needs</p>
<p><b>4.3</b> The schools will provide after-hours training and community access to labs, media centers, and classrooms.</p>	<p>A. Create and publish flexible schedules of after-hours technology access and training for students, parents, teachers, and community members</p> <p>B. Create opportunities for access to facilities for after-hours assistive technology training for students, parents, teachers, and community members</p>
<p><b>4.4</b> The schools will ensure that all their buildings are linked by the Internet to the State Library's DISCUS databases and to the Web sites of universities, museums, and other institutions to facilitate virtual communication between home, school, and community.</p>	<p>Host an electronic list through the SCTLIC Web portal for school districts and community entities interested in collaborative initiatives</p>

## II. ACTION LIST

- OCSD5 will initiate and increase community collaborations that give students, teachers, and members of the local community increased access to and training in technology, including assistive technology.
- Schools should develop a rubric to measure the success of their community partnerships.
- OCSD5 will publish school lab schedules showing after-hours technology access and training.
- OCSD5 will maintain logs of professional development, community offerings, and internship opportunities in technology.
- OCSD5 will maintain logs of partnerships and their role in helping research and evaluate technology projects.
- OCSD5 will publicize successful collaborations with outside entities in the demonstration, loan, and assessment of assistive technology.
- OCSD5 should provide a list of community partnerships and the results of their efforts on the SCTLIC Web portal.
- OCSD5 will post successful technology grant applications on the Internet for others to use as models
- OCSD5 will develop lists of possible partner organizations, institutions, and initiatives that may include the following:
  - South Carolina Commission on Higher Education
  - Distance education learning centers (DELICs)
  - Instructional Television (ITV)
  - School Technology Initiative
  - Math and Science Hubs
  - South Carolina: Teaching, Learning, Connecting (SCTLIC) Web portal
  - South Carolina Assistive Technology Advisory Committee
  - South Carolina Assistive Technology Project
  - South Carolina Commission for the Blind
  - South Carolina Department of Disabilities and Special Needs
  - South Carolina Department of Education
  - South Carolina Educational Television
  - South Carolina State Library
  - South Carolina Vocational Rehabilitation Department
- OCSD5 will plan and coordinate regular meetings of representatives of collaborative groups to determine how they can best cooperate to meet the professional development needs of South Carolina educators.

- OCSD5 will lead the formation of consortia among local education agencies, business and industry, public entities, private organizations, museums, libraries, colleges, and private schools for the full utilization of technology and assistive technology expertise.
- OCSD5 will publish a list of successful consortia, partnerships, and initiatives on the OCSD5 Web site and the SCTLTC Web portal.
- District surveys should provide increased access and use of school facilities for after-hours technology training.
- Districts should provide flexible technology training schedules to the OCSD5.
- Districts should provide information about assistive technology training opportunities on the OCSD5 Web site and through the SCTLTC Web portal.
- The OCSD5 should utilize the SCTLTC Web portal to maintain a list of volunteers for possible technology partnerships to benefit the state's schools.
- Each school should utilize its Web site to publish a list of volunteers for possible technology partnerships to benefit that school.

### **III. IMPLEMENTATION ACTION STEPS**

#### **DISTRICTS**

- Submit a technology plan, including a professional development plan, to the Office of Technology for approval
- Encourage flexible lab, media center, and classroom hours among schools, including opportunities for community members to see and try assistive technology
- Initiate partnerships with community entities to create greater access to technology and a community learning environment
- Initiate partnerships with community entities to research technology projects
- Include members of the community in writing technology grants to develop and fund better teaching and learning through technology, including assistive technology
- Utilize the Web site to publish a list of volunteers for possible technology partnerships
- Measure access and use of school technology facilities

#### **SCHOOLS**

- Submit a technology plan, including a community partnership plan, to the local district office
- Distribute parent and community information through report cards
- Develop, implement, and publicize flexible lab, media center, and classroom hours, including opportunities for community members to see and try assistive technology.
- Initiate partnerships with community entities to create greater access to technology and a community learning environment
- Initiate partnerships with community entities to research technology projects
- Include members of the community in writing technology grants to develop and fund better teaching and learning through technology, including assistive technology
- Include members of the community in writing technology grants to develop and fund better teaching and learning through technology, including assistive technology

## **IV. FUNDING CONSIDERATIONS**

### **DISTRICTS**

- Evaluation experts to help show impact of community programs and initiatives
- High-quality sustained community training technology programs offered via innovative delivery methods
- Community and apprentice internships
- Facility operation beyond the regular school day
- District survey administration, collection and analysis, and reporting
- Grant-writing experts and workshops

### **SCHOOLS**

- Evaluation experts to help show the impact of community programs and initiatives
- High-quality sustained community training technology programs offered via innovative delivery methods
- Community internships
- Facility operation beyond the regular school day
- School survey administration, collection and analysis, and reporting

## V. EVALUATION

Objectives	Possible Baseline Data	Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report	Outcomes (Include "action list" items achieved.)				
			JAN. 2009	JAN. 2010	JAN. 2011	JAN. 2012	JAN. 2013
<p><b>4.1</b> The school districts will establish community technology partnerships and collaborations by providing tools, resources, and training that support student transition, achievement, and outcomes. (The term <i>community</i> includes parents, businesses, state and local agencies, nonprofit groups, and institutions of higher education.)</p>	<ul style="list-style-type: none"> <li>Statewide achievement test scores</li> <li>Community technology access surveys</li> <li>Lab, media center, and classroom schedules</li> </ul>	<ul style="list-style-type: none"> <li>Statewide achievement test scores</li> <li>Community technology access surveys</li> <li>Lab, media center, and classroom schedules</li> <li>OCSD5 Technology Counts survey</li> </ul>					
<p><b>4.2</b> The OCSD5 will fully utilize all available resources by fostering collaboration and cooperation among state-supported organizations, institutions, and initiatives.</p>	<ul style="list-style-type: none"> <li>OCSD5 Technology Counts survey</li> <li>School technology plans</li> </ul>	<ul style="list-style-type: none"> <li>School technology plans</li> <li>Observations and interviews</li> <li>District and school Web site information</li> </ul>					
<p><b>4.3</b> The school districts will provide after-hours training and community access to labs, media centers, and classrooms.</p>	<ul style="list-style-type: none"> <li>Documentation of offerings provided via innovative delivery methods</li> </ul>	<ul style="list-style-type: none"> <li>Documentation of offerings provided via innovative delivery methods</li> <li>Districts and school list of grants and community partnerships</li> </ul>					
<p><b>4.4</b> The school districts will ensure that all their buildings are linked by LAN, WAN, and/or the Internet to the State Library's DISCUS databases and to the Web sites of universities, museums, and other institutions to facilitate virtual communication between home, school, and community.</p>							

## TECHNOLOGY DIMENSION 5

### SUPPORT CAPACITY

**Goal:** Orangeburg Consolidated School District 5 will expand support technology resources to assist educators and learners in meeting the instructional and academic standards as stated in the district Strategic Plan.

### SNAPSHOT OF CURRENT TECHNOLOGY USE

Orangeburg Consolidated School District 5 has invested in technology support systems that will provide a foundation for teaching, learning, communication, and administration in the public schools. The following provides a listing of those investments:

- ✓ Internet Filtering using Websense as required by CIPA
- ✓ Wireless network in all schools covering over 80% of each school building
- ✓ Phone system in every school classroom
- ✓ Email for all district personnel
- ✓ Email for all district middle and high school students
- ✓ All schools connected to district wide area network
- ✓ \$25 million in e-rate awards since 1998
- ✓ 20 meg internet connection
- ✓ District standard computer to reduce total cost of ownership
- ✓ District standard for electronic whiteboards
- ✓ District standard for classroom network printers

## OPERATIONAL PLAN

**Goal:** Orangeburg Consolidated School District 5 will expand support technology resources to assist educators and learners in meeting the instructional and academic standards as stated in the district Strategic Plan.

### I. OBJECTIVES AND STRATEGIES

<b>OBJECTIVES</b>	<b>STRATEGIES</b>
<p>The school districts will ensure that all students, including those with special needs, and teachers have access to electronic information resources.</p>	<ul style="list-style-type: none"> <li>A. Maintain a technology inventory that includes the status of current network/Internet access, workstations and other devices available for access, software applications available for addressing state academic standards, peripherals, and other factors related to universal access to network resources</li> <li>B. Conduct needs assessments (1) to identify required network components, workstations, and other devices needed for network access, including assistive technology devices, and (2) to identify and evaluate software applications required to meet academic needs as well as peripherals and other resources required to create universal access to network resources</li> <li>C. Create a district strategic plan for acquiring and implementing the technology, including assistive technology, that is required to provide universal access to network resources</li> <li>D. Develop the district strategic plan with input from all segments of the school community—students, teachers, therapists, administrators, parents, community members, community agencies, and local businesses—and include in the plan a mechanism for review and revision as needed</li> <li>E. Seek school and district funding from available local, state, and federal sources, including E-rate, grants, and bonds</li> </ul>
<p><b>5.2</b> The school districts will ensure that their schools have an integrated, secure network</p>	<ul style="list-style-type: none"> <li>A. Communicate in the district technology plan a vision for multimedia infrastructure designed</li> </ul>

<p>infrastructure with dynamic bandwidth capacity to support fully converged networks that allow for communication, data collection and distribution, and distance learning.</p>	<p>to support instruction</p> <ul style="list-style-type: none"> <li>B. Establish a system for identifying, specifying, prioritizing, and managing equipment for multimedia development in direct support of curricular and professional development objectives</li> <li>C. Ensure the installation, maintenance, and support of multimedia-capable teacher stations in classrooms including data projectors to support large-group instruction</li> <li>D. Research and implement an integrated network infrastructure capable of utilizing all distribution modules</li> <li>E. Use bundled distribution packages as a primary means of distribution to manage fully converged networks</li> <li>F. Install and maintain networks, virus protection, and Internet filtering according to industry standards by implementing systemic, state-of-the-art network security tools at all levels of access to LANs, WANs, and other networks</li> <li>G. Assess LAN/WAN technology currently implemented to determine SNMP (simple network management protocol) compliance</li> <li>H. Implement a district network management tool that performs automated software installation</li> </ul>
<p>The school districts will have qualified technical staff, including one networking engineer per WAN or per ten LANs, one networking technician per LAN, and one end-user support technician per every five hundred users.</p>	<ul style="list-style-type: none"> <li>A. Develop statewide minimum staffing requirements and job descriptions, with a state-guided salary schedule, for the positions of networking engineer, networking technician, educational technology director, and support technician</li> <li>B. Provide state-level network support for district engineers</li> <li>C. Appoint a district network manager who will lead a committee in identifying and evaluating network management tools that will meet the needs of the district</li> </ul>
<p><b>5.4</b> The school districts will implement a disaster recovery plan for all points of failure in</p>	<ul style="list-style-type: none"> <li>A. Ensure that disaster recovery plans are</li> </ul>

<p>LANs and WANs, including redundant data storage, robust automated backup, and immediate hardware recovery.</p>	<p>included in the district technology plan</p> <p>B. Ensure that schools will have electrical distribution systems that provide isolated circuits in all classrooms and redundant power sources for mission-critical equipment</p> <p>C. Implement a district management application that monitors bandwidth on the LAN and WAN and provides network failure alarms that can be accessed remotely</p>
<p><b>5.5</b> The school districts will implement obsolescence and upgrade plan to replace and recycle equipment and software.</p>	<p>Ensure that the obsolescence and upgrade plans are included in the district technology plan</p>
<p><b>5.6 OCSD5</b> will implement a plan to migrate from its existing telephone system to a VOIP solution.</p>	<p>Ensure that current and most feasible technology is being used within the district.</p>
<p><b>5.7</b> The OCSD5 and the school districts will increase their ability to design Web pages and Web-based instruction that are accessible to students and staff with special needs in accordance with Section 508 of the Rehabilitation Act of 1973 as amended by the Workforce Improvement Act of 1998. with special needs in accordance with Section 508 of the Rehabilitation Act of 1973 as amended by the Workforce Improvement Act of 1998.</p>	<p>Provide training in basic Web page accessibility principles to staff, teachers—and, when appropriate, students—who design Web pages as part of the curriculum</p>

## II. ACTION LIST

- OCSD5 will have access to a database with a complete technology inventory, including assistive technology, showing the type of equipment/device, its location, its use, peripherals to which it has access, applications to which it has access, and other relevant information.
- OCSD5 will maintain a needs-assessment document showing technology-based resources and applications required to address the mission of the district, including networking, hardware/devices, and software applications as well as assistive technology.
- OCSD5 will include in their local budgets line items for technology, including assistive technology, with sufficient funding to implement the designated strategies.
- OCSD5 will publish a procedure for the perpetual review of equipment used in multimedia development processes. Reviews should quantify equipment and processes by their impact on teaching and learning.
- OCSD5 will maintain a strategic plan for acquiring and implementing technology, including assistive technology, for universal access to network resources. This document should show the strategies for addressing the identified needs, the persons responsible for addressing and completing each strategy, and the resources/funds necessary to fully implement the strategies.
- OCSD5 technology plans will include a strategic vision for building a multimedia infrastructure to support instruction.
- OCSD5 technology plans will include a plan for installation and implementation of a new VOIP system to replace existing telephone system.
- District technology plans should include a disaster recovery plan.
- District technology plans should include obsolescence and upgrade plan, including strategies to refurbish, resell, recycle, or donate obsolete devices.
- District policies outlined in district technology plans should include security accountability, virus protection, and Internet filtering guidelines.
- District technology plans should provide for outlets and amperage and for meeting industry standards and building codes.
- Districts should use professional discussion groups to share the results of their research about the implementation of integrated network infrastructures and bundled distribution practices.
- OCSD5 should have records to show that they have assessed their current LAN/WAN technology.
- District network managers should provide the district office with quarterly reports of statistics on bandwidth utilization.
- OCSD5 should use the SDE Technology Counts on-line survey to report on their use of network management tools.

- OCSD5 will ensure that new school construction provides for isolated power in each classroom, computer lab, telecommunications closet, and work area.
- OCSD5 will provide UPS (uninterruptible power supply) systems for all critical equipment.
- OCSD5 will use the minimum staffing and salary requirements for the positions specified in objective 5.3.
- OCSD5 should have a network manager in place.
- The OCSD5 should establish network security support within the Office of Technology.
- District staff, teachers, and students should be aware of basic Web accessibility guidelines when designing Web pages.
- OCSD5 will designate a Web accessibility resource person to coordinate training and information sharing among district personnel.

### **III. IMPLEMENTATION ACTION STEPS**

#### **DISTRICTS**

- Maintain technology inventories, including assistive technology
- Conduct needs assessments to identify required technology, including assistive technology
- Create a strategic technology plan that includes strategies for acquiring, managing, and implementing required technology, including assistive technology
- Implement a district disaster recovery plan and an obsolescence and upgrade plan
- Seek funding from local, state, and federal sources
- Encourage and publicize flexible access schedules
- Create a vision for a multimedia infrastructure
- Encourage schools to provide multimedia-capable workstations
- Research and implement an integrated network infrastructure
- Use bundled distribution packages to manage fully converged networks
- Install and maintain secure networks
- Employ staff for adequate network maintenance and support
- Implement a district management application that monitors bandwidth on the LAN and WAN
- Ensure that schools have adequate electrical distribution systems
- Publish procedures and schedules for review of equipment and software used in multimedia development including rubrics for judging impact on teaching and learning
- Provide schools with the necessary guidance and training in creating Web pages to ensure that electronic information is accessible to students and teachers with special needs

#### **SCHOOLS**

- Create a strategic technology plan that includes strategies for acquiring and implementing required technology, including assistive technology
- Seek funding from local, state, and federal sources
- Create flexible schedules for access to technology
- Provide multimedia-capable workstations
- Install and maintain secure networks
- Employ staff for adequate network maintenance and support
- Provide adequate electrical distribution systems

## IV. FUNDING CONSIDERATIONS

### DISTRICTS

- Total cost of ownership (TCO) calculation to determine the allocation per student per year necessary to keep the pace with the need for access to network resources [Consortium for School Networking's TCO tool available on-line at <http://www.classroomtco.org>]
- Technology committee meetings to develop products such as the multimedia infrastructure plan and the disaster recovery plan
- Materials to publish an updated technology plan
- Multimedia teacher workstations including data projectors
- Hardware and software to secure all LANs and WANs to comply with district, state, and industry standards
- Technology director, networking engineer, and networking technician
- Equipment inventory assessment program
- Isolated circuit plan
- Support planning
- Technology needs assessments and surveys

### SCHOOLS

- Total cost of ownership (TCO) calculation to determine the allocation per student per year necessary to keep the pace with the need for access to network resources [Consortium for School Networking's TCO tool available on-line at <http://www.classroomtco.org>]
- Technology committee meetings to develop products such as the multimedia infrastructure plan and the disaster recovery plan
- Materials to publish an updated technology plan
- Multimedia teacher workstations including data projectors
- Hardware and software to secure all LANs and WANs to comply with district, state, and industry standards
- Support planning
- Technology needs assessments and surveys

## V. EVALUATION

Objectives	Possible Baseline Data	Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report	Outcomes (Include "action list" items achieved.)				
			JAN. 2009	JAN. 2010	JAN. 2011	JAN. 2012	JAN. 2013
<p><b>5.1</b> The school districts will ensure that all students, including those with special needs, and teachers have access to electronic information resources.</p>	<ul style="list-style-type: none"> <li>Statewide achievement test scores</li> <li>District report cards</li> <li>Professional development tracking and surveys</li> </ul>	<ul style="list-style-type: none"> <li>Statewide achievement test scores</li> <li>District report cards</li> <li>Professional development tracking and surveys</li> </ul>					
<p><b>5.2</b> The school districts will ensure that their schools have an integrated, secure network infrastructure with dynamic bandwidth capacity to support fully converged networks that allow for communication, data collection and distribution, and distance learning.</p>	<ul style="list-style-type: none"> <li>District, school, and community surveys</li> <li>School technology and improvement plans</li> </ul>	<ul style="list-style-type: none"> <li>Observations and interviews</li> <li>Documented access to technology resources</li> <li>District, school, and community surveys</li> <li>School technology and improvement plans</li> <li>Documented access to technology resources</li> </ul>					
<p><b>5.3</b> The school districts will have qualified technical staff, including one networking engineer per WAN or per ten LANs, one networking technician per LAN, and one end-user support technician per every five hundred users.</p>	<ul style="list-style-type: none"> <li>Documented access to technology resources</li> <li>Technology needs assessments</li> <li>OCSD5 Technology Counts on-line survey</li> </ul>	<ul style="list-style-type: none"> <li>Technology needs assessments</li> <li>OCSD5 Technology Counts on-line survey</li> <li>Budget data</li> <li>State personnel reports</li> </ul>					
<p><b>5.4</b> The school districts will implement a disaster recovery plan for all points of failure in LANs and WANs, including redundant data storage, robust automated backup, and immediate hardware recovery.</p>	<ul style="list-style-type: none"> <li>Budget data</li> <li>State personnel reports</li> </ul>						
<p><b>5.5</b> The school districts will implement obsolescence and upgrade plan to replace and recycle equipment and software.</p>							

## V. EVALUATION

Objectives	Possible Baseline Data	Possible Data Sources to Be Used for Ongoing Evaluation and End-of-Program Report	Outcomes (Include "action list" items achieved.)				
			JAN. 2009	JAN. 2010	JAN. 2011	JAN. 2012	JAN. 2013
<p><b>5.6</b> OCSD5 will implement a plan to migrate from its existing telephone system to a VOIP solution.</p>							
<p><b>5.6</b> The OCSD5 will increase their ability to design Web pages and Web-based instruction that are accessible to students and staff with special needs in accordance with Section 508 of the Rehabilitation Act of 1973 as amended by the Workforce Improvement Act of 1998.</p>							

## ACKNOWLEDGEMENTS

- **The Orangeburg Consolidated School District Technology Committee**
- **The Office of Information Technology Staff**
- **South Carolina State Department of Education**

## CUMULATIVE TARGETS AND BENCHMARKS

**Note: These targets and benchmarks will be monitored and adjusted annually in the report to the people of South Carolina.**

2009–10

### Learners and Their Environment

- Seventy-five percent of Orangeburg Consolidated School District 5 students will possess effective communication skills and technology literacy as evidenced by teacher and student technology portfolios and by presentations at technology conferences and fairs.

### Professional Capacity

- Ninety-five percent of Orangeburg Consolidated School District 5 teachers will possess technology proficiency and integrate technology into the curriculum to teach the state curriculum standards.
- Orangeburg Consolidated School District 5 will have technology coaches who will train teachers and visit classrooms to help teachers integrate technology into the curriculum.

### Instructional Capacity

- Sixty percent of Orangeburg Consolidated School District 5 teachers will integrate technology and information literacy skills into their teaching of the South Carolina academic standards as evidenced by the technology proficiency assurance forms and teacher portfolios.
- Sixty percent of Orangeburg Consolidated School District 5 students will meet the information literacy and technology skills for their grade level as found on the SDE's performance matrix for information literacy and technology education.

### Community Connections

- Orangeburg Consolidated School District 5 will report a 10 percent yearly increase in community collaborations that result in better teacher and student access to technology, better teacher and student use of technology, more teachers and student real-world experiences in technology-related fields, more research and evaluation of technology projects, and more community collaboration technology grants submitted and dollars funded.
- Ninety percent Orangeburg Consolidated School District 5 will maintain a K–12 educational portal that lists willing community participants and partners who can provide services to supplement the curriculum.
- Orangeburg Consolidated School District 5 will provide and document professional development training in how to access and use available community resources. Results will be reported through the OCSD5 on-line professional development tracking system.
- Orangeburg Consolidated School District 5 elementary, middle and high schools will provide access to technology-related facilities after hours for parents, teachers, and community members.

### Support Capacity

- Orangeburg Consolidated School District 5 will include in their technology plans an assessment of their current technology needs, their current technology inventory, and their current technology support strategies.

## 2010–11

### Learners and Their Environment

- Seventy-five percent of Orangeburg Consolidated School District 5 students will possess effective communication skills and technology literacy as evidenced by teacher and student technology portfolios and by presentations at technology conferences and fairs.

### Professional Capacity

- Ninety-five percent of Orangeburg Consolidated School District 5 teachers will possess technology proficiency and integrate technology into the curriculum to teach the state curriculum standards.
- Orangeburg Consolidated School District 5 will have technology coaches who will train teachers and visit classrooms to help teachers integrate technology into the curriculum.

### Instructional Capacity

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- Sixty percent of Orangeburg Consolidated School District 5 students will meet the information literacy and technology skills for their grade level as found on the SDE's performance matrix for information literacy and technology education.

### Community Connections

- Orangeburg Consolidated School District 5 will report a 10 percent yearly increase in community collaborations that result in better teacher and student access to technology, better teacher and student use of technology, more teachers and student real-world experiences in technology-related fields, more research and evaluation of technology projects, and more community collaboration technology grants submitted and dollars funded.
- Ninety percent Orangeburg Consolidated School District 5 will maintain a K–12 educational portal that lists willing community participants and partners who can provide services to supplement the curriculum.
- Orangeburg Consolidated School District 5 will provide and document professional development training in how to access and use available community resources. Results will be reported through the OCSD5 on-line professional development tracking system.
- Orangeburg Consolidated School District 5 elementary, middle and high schools will provide access to technology-related facilities after hours for parents, teachers, and community members.

### Support Capacity

Orangeburg Consolidated School District 5 will include in their technology plans an assessment of their current technology needs, their current technology inventory, and their current technology support strategies.

## 2011–12

### Learners and Their Environment

- Seventy-five percent of Orangeburg Consolidated School District 5 students will possess effective communication skills and technology literacy as evidenced by teacher and student technology portfolios and by presentations at technology conferences and fairs.

### Professional Capacity

- Ninety-five percent of Orangeburg Consolidated School District 5 teachers will possess technology proficiency and integrate technology into the curriculum to teach the state curriculum standards.
- Orangeburg Consolidated School District 5 will have technology coaches who will train teachers and visit classrooms to help teachers integrate technology into the curriculum.

### Instructional Capacity

- Sixty percent of Orangeburg Consolidated School District 5 teachers will integrate technology and information literacy skills into their teaching of the South Carolina academic standards as evidenced by the technology proficiency assurance forms and teacher portfolios.
- Sixty percent of Orangeburg Consolidated School District 5 students will meet the information literacy and technology skills for their grade level as found on the SDE's performance matrix for information literacy and technology education.

### Community Connections

- Orangeburg Consolidated School District 5 will report a 10 percent yearly increase in community collaborations that result in better teacher and student access to technology, better teacher and student use of technology, more teachers and student real-world experiences in technology-related fields, more research and evaluation of technology projects, and more community collaboration technology grants submitted and dollars funded.
- Ninety percent Orangeburg Consolidated School District 5 will maintain a K–12 educational portal that lists willing community participants and partners who can provide services to supplement the curriculum.
- Orangeburg Consolidated School District 5 will provide and document professional development training in how to access and use available community resources. Results will be reported through the OCSD5 on-line professional development tracking system.
- Orangeburg Consolidated School District 5 elementary, middle and high schools will provide access to technology-related facilities after hours for parents, teachers, and community members.

### Support Capacity

Orangeburg Consolidated School District 5 will include in their technology plans an assessment of their current technology needs, their current technology inventory, and their current technology support strategies.

## Funding and Budget

**Resource Requirements** Leadership and vision are essential to the successful implementation and deployment of this IT Plan. This plan hinges on the essential components-funds and additional staff.

Information Technology Funding Plan Requirements						
Objective	Funding sources	2009 - 2010	2010 - 2011	2011 - 2012	Total	
Purchase laptop computers for teachers as part of the training program "Moving the teacher forward with technology"	E2T2 / Title 1/ocal	\$ 30,000.00	\$ 30,000.00	\$ 30,000.00	\$ 90,000.00	
Purchase video projection equipment units for each media center for teacher check out	E2T2 / Title 1/Local	\$ 5,000.00	\$ 0.00	\$ 0.00	\$ 5,000.00	
Purchase electronic whiteboard for all media centers	E2T2 /K12 Partnership	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 45,000.00	
Software maintenance media center software system	Local	\$ 21,000.00	\$ 21,000.00	\$ 21,000.00	\$ 63,000.00	
Purchase new multimedia PCs for all media centers	Local / Title1	\$ 10,000.00	\$ 10,000.00	\$ 10,000.00	\$ 30,000.00	
Teacher Staff development	Local, E2T2, K12 Partnership, PDSI	\$ 75,000.00	\$ 75,000.00	\$ 75,000.00	\$ 150,000.00	
District teacher/staff assessment software	Local /E2T2	\$ 5,000.00	\$ 5,000.00	\$ 5,000.00	\$ 15,000.00	
Lease computers and laptops for teachers and students	Local	\$300,000.00	\$300,000.00	\$300,000.00	\$ 900,000.00	
Purchase new multimedia PCs for all schools as needed in the replacement plan.	Local / Title1	\$ 60,000.00	\$ 60,000.00	\$ 60,000.00	\$ 180,000.00	
Provide staff development opportunities for the Information Technology Staff	K12 Partnership, Local	\$ 15,000.00	\$ 15,000.00	\$ 15,000.00	\$ 45,000.00	
Network maintenance	E-rate, Local	\$200,000.00	\$200,000.00	\$200,000.00	\$ 600,000.00	

<b>Objective</b>	<b>Funding sources</b>	<b>2009 - 2010</b>	<b>2010 - 2011</b>	<b>2011 – 2012</b>	<b>Total</b>
WAN/LAN hardware upgrade/replacement	E-rate, Local	\$ 200,000.00	\$ 200,000.00	\$ 200,000.00	\$ 600,000.00
Distance Education	E-rate , Local/ K12 Partnership	\$ 20,000.00	\$ 20,000.00	\$ 20,000.00	\$ 60,000.00
Purchase/maintain Academic instructional software subscriptions @ 25.00/student	Local, Title 1	\$ 180,000.00	\$ 180,000.00	\$180,000.00	\$ 440,000.00
					\$ -
					\$ -
					\$ -
					\$ -
<b>Total</b>		<b>\$ 1,136,000.00</b>	<b>\$ 1,131,000.00</b>	<b>\$1,131,000.00</b>	<b>\$ 3,398,000.00</b>

## Orangeburg Consolidated School District Five Proposed Information Technology Staff

[Redacted]

<b>Director</b> Russell M. Zimmerman	
<b>Administrative Specialist</b> LaViesha Frazier-Phelps	<b>Temporary Position (Help Desk)</b> (Vacant)

[Redacted]

Technology Support Services	Administrative Services	Instructional Technology	Network Services
<b>Operation Manager</b> Reginal Rhodes	<b>Administrative Software Analyst</b> Jacob Healtey	<b>Manager of Instructional Technology Facilitator</b> Quen Dantzer	<b>Information Resource Consultant</b> Taphnie Berry-Sanders
<b>Desktop/PC Services Specialist</b> Vacant	<b>Application Analyst</b> TBA	<b>Technology Integration Facilitator</b> Five(5)	<b>Software/Desktop Specialist</b> Shakkia Walker
<b>Desktop/PC Services Specialist</b> Javan Johnson	<b>Pathways Coordinator</b> Annette Fennell	DEL Angie Simms	<b>Network Administrator</b> (Vacant)
<b>LAN/WAN/Desktop Specialist</b> Rondrick Brown			
<b>Desktop/PC Services Specialist</b> Maurice brown			

## Appendix A: No Child Left Behind (NCLB) Alignment

	NCLB Correlate Statement
	<b>Strategies for improving academic achievement and teacher effectiveness</b> <ul style="list-style-type: none"><li>• See Dimensions 1, 2 and 3</li></ul>
	<b>Goals for using advance technology</b> <ul style="list-style-type: none"><li>• See Dimensions 1 through 5</li></ul>
	<b>Steps to increase accessibility</b> <ul style="list-style-type: none"><li>• See Dimension 5</li></ul>
	<b>Promotion of curricula and teaching strategies that integrate technology</b> <ul style="list-style-type: none"><li>• See Dimensions 2 and 3</li></ul>
	<b>Professional development</b> <ul style="list-style-type: none"><li>• See Dimension 2</li></ul>
	<b>Technology type and costs</b> <ul style="list-style-type: none"><li>• See Funding and Budget</li></ul>
	<b>Coordination with other resources</b> <ul style="list-style-type: none"><li>• See Dimension 4</li></ul>
	<b>Integration of technology with curricula instruction</b> <ul style="list-style-type: none"><li>• See Dimension 3</li></ul>
	<b>Innovative delivery strategies</b> <ul style="list-style-type: none"><li>• See Dimensions 1 through 5</li></ul>
	<b>Parent involvement</b> <ul style="list-style-type: none"><li>• See Dimension 4</li></ul>

	<b>Collaboration with adult literacy service providers</b> <ul style="list-style-type: none"><li>• See Dimension 3 and 4</li></ul>
	<b>Accountability measures</b> <ul style="list-style-type: none"><li>• See Dimensions 1 through 5</li></ul>
	<b>Support resources</b> <ul style="list-style-type: none"><li>• See Dimension 5</li></ul>

## Appendix B: E-Rate Alignment

	E-Rate Correlate Statement
	<b>The plan must establish clear goals and a realistic strategy for using telecommunications and information technology to improve education and library services.</b>  <b>See Dimension 3</b>
	<b>The plan must have a professional development strategy to ensure that staff knows how to use these technologies to improve education or library services.</b>  <b>See Dimension 2</b>
	<b>The plan must include an assessment of the telecommunication services, hardware, software, and other services that will be needed to improve education or library services.</b>  <b>See District Needs Assessment</b>
	<b>The plan must provide for a sufficient budget to acquire and support the non-discounted elements of the plan: the hardware, software, professional development, and other services that will be needed to implement the strategy.</b>  <b>See Funding and Budget</b>
	<b>The plan must include an evaluation process that enables the school or library to monitor progress toward the specified goals and make mid-course corrections in response to new developments and opportunities as they arise.</b>  <b>See Dimension 1 through 5 evaluation section</b>

## **TECHNOLOGY ACCEPTABLE USE**

Code **New Policy** Issued **DRAFT/09**

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Purpose: To establish the board's vision and the basic structure for the use of technology resources in instruction, administrative use, and to articulate the acceptable use of district technology resources.

Technology is a vital part of education and the curriculum of Orangeburg Consolidated School District Five. In an effort to promote learning and expand educational resources for students, the district has made arrangements to provide Network access to students and staff. The district's goal in providing this service is to promote educational excellence by facilitating resource sharing, communication, and innovation. Access to the Network, an "electronic highway" connecting millions of computer users all over the world, will allow Orangeburg Consolidated School District Five students and staff the opportunity to communicate with others on a global level and access educational materials worldwide.

Access to the Network is a privilege, not a right. With this privilege, there also is a responsibility to use the Network solely for educational purposes and not to access inappropriate materials unsuitable for students. To that end, the Orangeburg Consolidated School District Five administration is directed to develop appropriate guidelines governing the use of district and personal computing devices when utilizing district-provided Network resources..

As part of the implementation of the administration's guidelines, students and staff must be instructed on the appropriate use of the Network. In addition, parents/legal guardians must sign a permission form to allow students to have access the Network. Students must also sign a form acknowledging that they have read and understand the Technology Acceptable Use policy and administrative regulations and assuring that they will comply with the policy, regulations and understand the consequences of violating the policy or regulations. District staff must sign a similar acknowledgment form before they will be allowed to access the Network. Inappropriate use by any person will not be tolerated.

### **Accessing inappropriate sites**

**Student Network activities will be monitored by the District to ensure students are not accessing inappropriate sites that have audio and/or visual depictions that include obscenity, child pornography, or are harmful to minors (i.e. cyber bullying, harassment, discriminatory attacks, etc.)**

**The district will provide reasonable notice of and at least one public hearing or meeting to address and communicate its Network safety measures.**

**District and school computer technicians who are working with a computer and come across sexually explicit images of children must report this to respective district/ school officials.**

**Adopted ^**

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## Legal references:

### A. Federal law:

1. **47 USC Section 254(h) - Children's Network Protection Act.**
2. The Digital Millennium Copyright Act of 1998, Section 512 - Limitations on liability relating to material online.

### B. S.C. Code of Laws, 1976, as amended:

1. **Section 10-1-205 - Computers in public libraries; regulation of Network access.**
2. **Section 16-3-850 - Encountering child pornography while processing film or working on a computer.**
3. **Section 16-15-305 - Disseminating, procuring or promoting obscenity unlawful; definitions; penalties; obscene material designated contraband.**

*Administrative Rule*

# TECHNOLOGY ACCEPTABLE USE

Code **NEW POLICY** Issued **DRAFT/09**

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As technology is a vital part of the educational process and the curriculum of Orangeburg Consolidated School District Five (OCSD5), students and staff will be provided access to the District Local Area Network (LAN) referred to as “Network” throughout this document. Network is defined as all computer resources, including software, hardware, security cameras, telephone lines, and services that allow connection of District computers to other computers, whether they are within or external to the District. By providing this access, the District intends to promote educational excellence and allow access to resources unavailable through traditional means.

With access to computers and people all over the world also comes the availability of material that may not be of educational value. Orangeburg Consolidated School District Five has taken precautions to restrict access to inappropriate materials. However, on a global Network, it is impossible to control all materials and limit all access to information that has no educational value. Orangeburg Consolidated School District Five firmly believes that the valuable information and the interactions available on this worldwide Network far outweigh the possibility that users may procure material that is not consistent with the educational goals of the District. Users are defined as anyone authorized by administration to use the Network. This includes, but is not limited to, staff, students, parents, vendors, contractors, and volunteers. Additionally, this rule reflects that there is no expectation of privacy in the use of e-mail or Network communications when such communications occur over OCSD5 provided equipment by OCSD5 employees, students, or others.

The smooth operation of the Network relies on the proper conduct of the end users who must adhere to strict guidelines. These guidelines are provided here so that users are aware of their responsibility when using the Network. Any violation of these guidelines will subject the user to appropriate disciplinary action and possible denial of access to the Network.

Prior to accessing the Network, students and staff must receive instruction on the appropriate use of the Network. In addition, parents/legal guardians will be required to sign a permission form at the beginning of each school year before students will be allowed access. Students must also sign a form annually acknowledging that they have read and understood this administrative rule and that they will comply with the guidelines set forth herein and that they understand the consequences for violating these guidelines [IJNDB-E(1)]. Employees must sign a similar acknowledgment form [IJNDB-E(2)].

## **Terms and conditions of use**

### *Acceptable use*

The purpose of the District’s decision to provide Network access is to allow and expand opportunity for research and education by providing access to unique resources and the opportunity for collaborative work. All use of the Network must be in support of education and research and consistent with the rules appropriate for the Network. Transmission of any material in violation of any national or state laws or regulations is prohibited. This includes, but is not limited to, copyrighted material, threatening or obscene material and material protected by trade secret.

### *Monitoring*

Administration reserves the right to review any material on user accounts for purposes of maintaining adequate filespace and monitoring appropriateness of material accessed through the Network. In reviewing and monitoring user accounts for the purpose of determining adequate filespace, the District shall respect the privacy rights of user accounts.

#### *Procedures for use*

Administrators, teachers, and staff may access the Network for educational or work-related purposes at any time that is not disruptive and does not interfere with the performance of other personnel.

Students will be allowed to access the Network only when they are properly supervised by a designated District employee during the period of use. No student may access the Network without permission.

#### *Rules governing use*

The use of the Network is a privilege, not a right, and inappropriate use will result in cancellation of Network privileges. All staff and students must abide by the generally accepted rules of Network etiquette, including the following, but not limited to:

- The District discourages the use of Social Networking sites and other online communications which include
  - A. derogatory comments related to students or staff;
  - B. crude comments or references to sexual activity;
  - C. photographs of nudity or near nudity;
  - D. photographs of or references to drug use, excessive alcohol use, or inebriation;
  - E. photographs of provocative poses or sexual activity; and
  - F. potentially offensive commentary (i.e. race, disability, sexual orientation).
- All users are expected to abide by the generally accepted rules of Network etiquette. These standards of conduct include, but are not limited to the following:
  - A. users should be polite. The use of abusive language is prohibited. Use appropriate language. The use of profanity, vulgarities or any other inappropriate language is prohibited.
  - B. engaging in activities which are prohibited under local, state or federal law is prohibited.
- Do not reveal your personal address and/or telephone number or that of other users unless compelled to by law. Users of the Network will be held responsible for all activity associated with the user's account. Users should not share their passwords with anyone, engage in activities that would reveal anyone's password, or allow anyone to use a computer to which they are logged on. Users may disclose their passwords to Network technicians and/or their school administrators whose intentions are to diagnose and/or verify Network applications assigned to the user are effectively running for the user and/or by the user (i.e. Novell, GroupWise, IGPro, etc.).

Note that electronic mail is not guaranteed to be private. Messages relating to or in support of illegal or inappropriate activities will be reported to the appropriate authorities.

- Do not use the Network to send or receive messages that discriminate based on gender, race, color, religion, ethnic or national origin, political beliefs, marital status, age, sexual

orientation, social and family background, linguistic preference, disability or remarks that are inflammatory.

- Do not disrupt, harass, cyber bully, or annoy other users.
- All communications and information accessible via the Network should be assumed to be private property of the school District. Always cite quotes, references, and sources.
- Never access inappropriate or restricted information, such as pornography or other obscene materials, or other information not directly related to the educational purpose for which access is being provided. Restricted information includes obscene, libelous, indecent, vulgar, profane or lewd materials; advertisements for products or services not promoted to minors by law; insulting, fighting and harassing words; and other materials which may cause a substantial disruption of the academic or work environment.
- Vandalism is also prohibited and will result in cancellation of privileges. Vandalism is defined as any malicious attempt to harm or destroy data of another user and includes, but is not limited to, the uploading or creation of computer viruses.
- Do not use the Network in such a way that other users would be unable to get the full benefit of information available (i.e. listening to streaming radio, viewing streaming videos, etc.). All users should remain on the system only as long as necessary to complete their work so that other individuals will have equal opportunities to access the Network.
- Use of the Network for product advertisement, financial, and commercial activities, political campaigning, or solicitation is prohibited.
- The use of Network tools such as blogs and discussion boards are intended for educational purposes only.
- All users should use the Network for legitimate educational, school District, or school business purposes.
- Always follow the instructions of the supervising staff member.

### **Penalties for improper use**

An employee who violates the terms of this administrative rule or otherwise misuses the Network to access inappropriate material will be subject to disciplinary action, up to and including termination. In addition, the privilege of accessing the Network also will be subject to cancellation for up to a year.

Students who violate the terms of this administrative rule or who otherwise misuse their access to the Network also will be subject to disciplinary action in accordance to the District student behavior code. Network access privileges also may be canceled for up to one year. Violations of the laws of the United States or the state of South Carolina also may subject the user to criminal prosecution. If a user incurs unauthorized costs, the user, as well as the user's parents/legal guardians, if the user is a student, will be responsible for all such costs.

**INTERNET ACCEPTABLE USE POLICY**  
**Student/Parent Certification Form**

I have read and understand the Orangeburg Consolidated District Five Internet Acceptable Use Policy and Administrative Rule. I understand and will abide by the conditions and rules set forth therein. I further understand that violation of these conditions and rules are unethical and also may constitute a criminal offense. Should I commit any violations, my access privilege may be revoked for up to one year, disciplinary action may be taken, and appropriate legal action may be instituted. I also agree to be responsible for any unauthorized costs incurred by my use of the Internet.

---

Date

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Student

As the Parent/Guardian of this student, I have read and understand the Internet Acceptable Use Policy and Administrative Rule. I understand that this access is designed solely for educational purposes. I further understand that if my child violates these conditions and rules, his or her access privileges may be revoked for up to one year and disciplinary action may be taken.

---

Date

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Parent/Guardian

**INTERNET ACCEPTABLE USE POLICY**  
**Staff Member Certification Form**

I have read and understand the Orangeburg Consolidated School District Five Internet Appropriate Use Policy and Administrative Rule. I understand and will abide by the conditions and rules set forth therein I further understand that violation of these conditions and rules are unethical and also may constitute a criminal offense. Should I commit any violations, my access privilege may be revoked for up to one year, disciplinary action may be taken, and appropriate legal action may be instituted. I also agree to be responsible for any unauthorized costs incurred by my use of the Internet.

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**Date**

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**Staff Member**

## **Appendix D: Report on Last Years Progress toward Goals, Objectives, Strategies, Benchmarks, Actions, and Outcomes**

### **Initiatives**

The District has spent funds building telecommunications infrastructure, purchasing computers, instructional and support software, and other computer devices over the years. The challenge now is to bring all the components and personnel together to infuse the use of technology into the daily operations of the district. This infusing of technology will enrich the curriculum; stream line the functions of support staff, and empower administrators with access to technology will enhance communications with students, teachers and community.

The IT Department's role is to create a technology program that provides staff development training for teachers and will enable them to integrate the use of technology into the regular instructional program. Successful technology integration will play an important role in the advancement of our students in today's society.

The access to data on the students we serve is increasingly important and should be easily accessible. The emphasis of "No Child Left Behind" and meeting state standards has increased the decision making responsibilities of teachers and administrators to access and use data.

### **2009-2013 Projects Priorities**

1. Implementation of a district competency test for teachers and administrators to test level 1 technology competencies. (Spring 2005)
2. Continue the training of district personnel on using the telephone system and voice mail.
3. Create a new user manual.
4. Provide for professional development for each member of the Information Technology staff.
5. Replace hardware used to provide video conferencing classes. Maintain a 95% uptime of services.
6. Expand the use of video conferencing to other instructional programs.
7. Implementation of a year-long program to help teachers incorporate technology into the daily curriculum. See program description in **Moving the Teacher forward with Technology**.
8. Design a process to lease computers for district classrooms, computer labs, and support staff on a three-year life cycle.
9. Expand the use of the Parent Link system to allow teachers to communicate with parents.
10. Expand the use of the Parent Link system to allow parents access to student's grades and attendance information.
11. Replace the network server at the District Office and schools as needed.
12. Continue to install wireless infrastructure in the schools where it is not installed.
13. Continue to work towards a 5 to 1 ratio of students to computers district wide.
14. Create a district wide computer network disaster recovery (backup and recovery) plan.

- 15.** Provide computer instructional software that will individualize training for students.
- 16.** Make upgrades to installed Teknet PA/Media Retrieval systems in all schools.
- 17.** Installation of Media Center security detection system in middle and high schools.
- 18.** Annual Instructional Technology Boot Camp at end of each school year.
- 19.** Installation of air conditioner units in all server rooms at school sites
- 20.** Replace ups on core network equipment and Teknet systems
- 21.** Plan, procure and installation of new VOIP system to replace existing telephone system
- 22.** Continue to upgrade and/or replace school security camera systems

## Appendix E

**Purpose:** The purpose of this policy is to articulate the requirements of having a user account to access the Districts information technology resources and data.

### Orangeburg Consolidated School District Five Information Technology Registration Form

This form is required to give all Orangeburg Consolidated School District Five employees, who need Information Technology access, the proper user account to various file servers and associated resources. Any employee needing access must have a valid user account to access E-mail, print sharing or Internet resources. This form must be submitted & approved by the Principal or Davison Head off your school /Division before access is granted. Please provide the following information and forward the completed form to the Office of Information Technology for processing.

First Name: \_\_\_\_\_ Middle Initial: \_\_\_\_\_ Last Name: \_\_\_\_\_

Job Title: \_\_\_\_\_ School: \_\_\_\_\_

Last Four Digits of Social Security Number: \_\_\_\_\_ Phone Number/Extension: \_\_\_\_\_

New Employee?  Yes  No

Transferred to New School Location?  Yes  No

- School Location Transferred From \_\_\_\_\_

- School Location Transferred To \_\_\_\_\_

Please record the following information for the Technology equipment that is currently located in your classroom or office. You may attach additional sheets if necessary.

#### Computer

The serial and model numbers are located  
On the front of the computer, usually below the  
CD-ROM or diskette drive.

#### Printer

The printer type is located on the front of the printer.  
The model and serial numbers can be found on the back of  
Most printers.

Type: \_\_\_\_\_

Type: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Model Number: \_\_\_\_\_

Model Number: \_\_\_\_\_

District Tag Number: \_\_\_\_\_

District Tag Number: \_\_\_\_\_

Do you currently have an assigned user name and password for the following three (3) resources?

| Logging onto the Network?  Yes  No | Logging into E-mail?  Yes  No | Logging into Voicemail?  Yes  No |

**For Office of Information Technology Use Only**

**Novell NetWare Network Login:** User Name: \_\_\_\_\_ Network Login Password: temppass

**E-Mail User Name:** \_\_\_\_\_ Temporary E-Mail Password: temppass

**GroupWise E-Mail Addresses:** \_\_\_\_\_ or @orangeburg5.k12.sc.us  
(For Internal Use) (For External Use)

**Voicemail Telephone Extension** \_\_\_\_\_ Temporary Voicemail Password: 1212

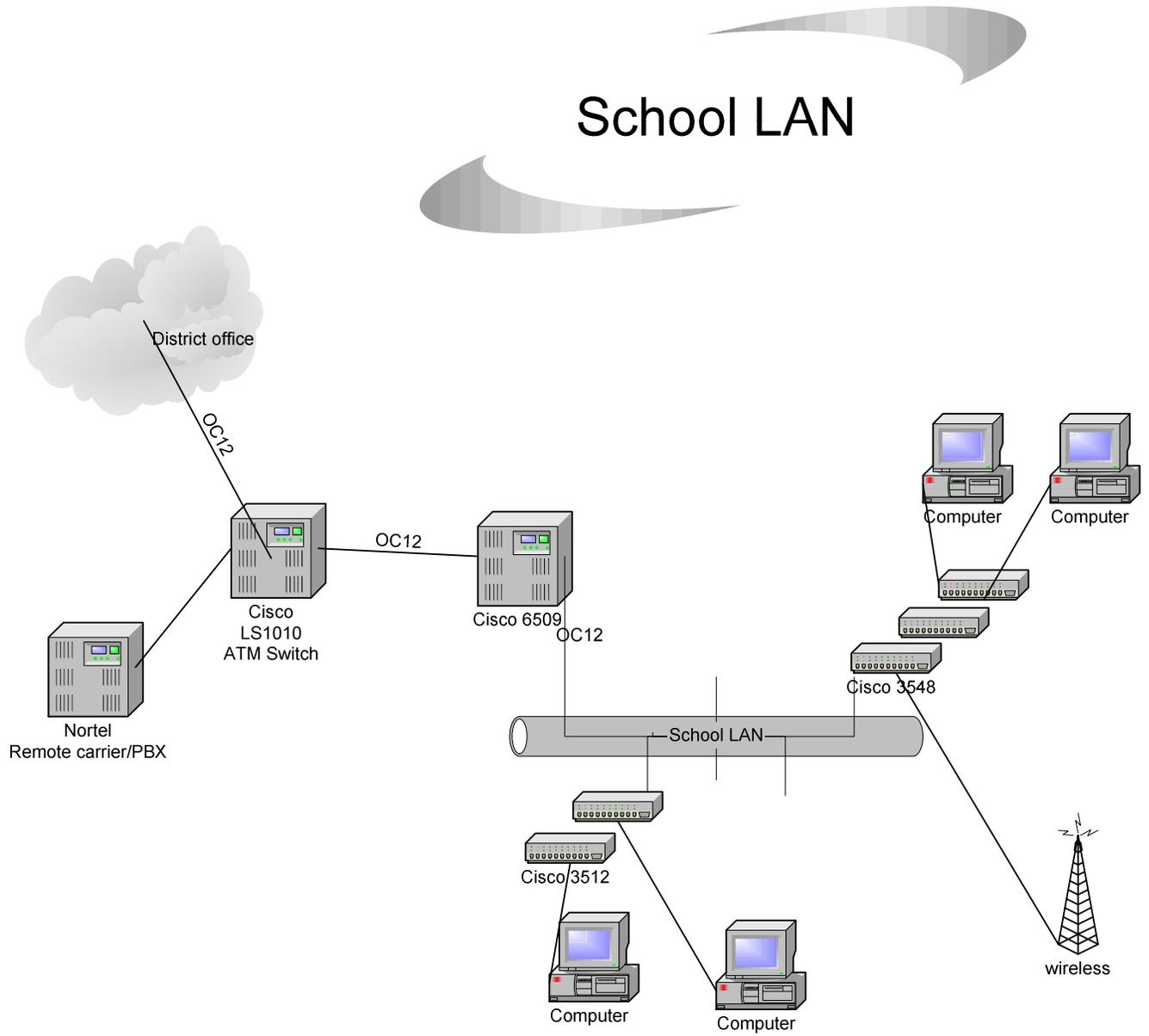
**User Directory:** \\ \_\_\_\_\_ \ Groups Assigned to: \_\_\_\_\_

**Technology Representative:** \_\_\_\_\_ **Date Completed:** \_\_\_\_\_

# APPENDIX F

## Local Area Network (LAN)

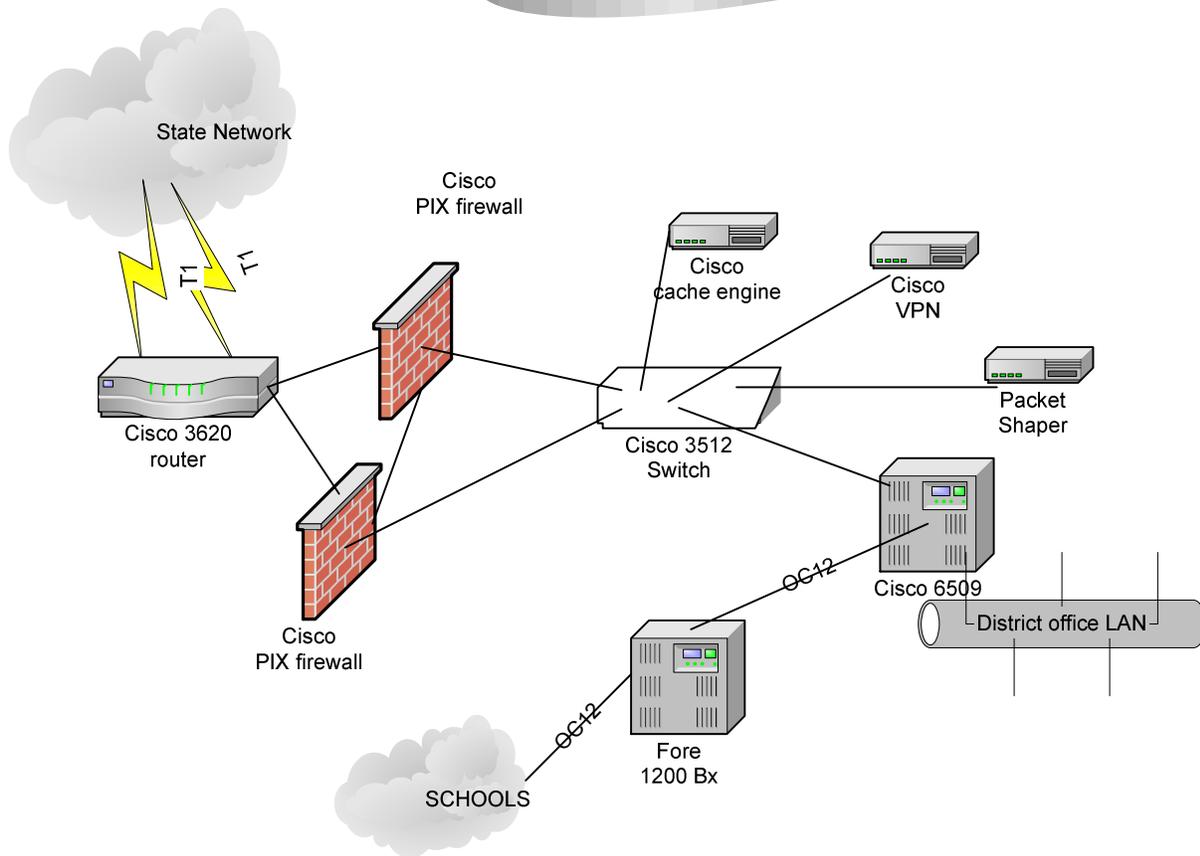
### School LAN



APPENDIX G

# Internet Access

## Internet DMZ



# APPENDIX H

## Wide Area Network (WAN)

